

UTAH STATE TAX COMMISSION

Property Tax Division

1999 ASSESSMENT/SALES RATIO STUDY

The year 1999 is centered within a horizontal oval. The oval is defined by a single black line. The text '1999' is in a large, bold, sans-serif font.

FOR THE PERIOD

JANUARY 1, 1998 TO DECEMBER 31, 1998

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GLOSSARY 40

Utah law requires all real property to be assessed at market value.¹ Assessing property consistently at market value creates equity by ensuring that the property tax burden is distributed uniformly among taxpayers throughout the state. Counties are responsible for assessment of property on a local basis. The Utah Code requires assessors to complete property reviews on a five-year cycle and to update values annually through reappraisal or other value adjustments.² The State Tax Commission utilizes the Assessment/Sales Ratio Study to monitor and equalize local assessments of real property statewide.

The Property Tax Division of the Utah State Tax Commission is responsible for the Assessment/Sales Ratio Study. It is conducted annually as prescribed by statute.³ The ultimate goal of the study is to ensure that all locally assessed real property throughout the state is assessed uniformly based on market value. The study therefore serves as both a monitoring device for the State Tax Commission as well as a tool for counties in achieving quality assessments.

The study process is evolving through the years. The statistical methods employed in the study are more sophisticated and reliable than in years past. County officials and personnel are becoming more involved in the actual gathering, cleaning and analysis of the data. Innovative efforts of communication by both state and local parties are allowing the study to evolve into more of a tool for quality assessments and less of a policing device.

The Utah Assessors Association and other county officials have contributed much time and resource to this study. Their increasing participation and support is acknowledged and appreciated.

1 Utah Code, §59-2-103

2 Utah Code, §59-2-303.1

3 Utah Code, §§59-2-704 & 704.5

INTRODUCTION

This Assessment/Sales Ratio Study is conducted in accordance with the relevant state statutes,⁴ administrative rules,⁵ and using the applicable guidelines recommended for such studies by the International Association of Assessing Officers (IAAO).⁶

The purpose of this study is to measure the overall assessment performance and effectiveness of the local assessment jurisdiction. Two general tests are employed.

First, the “level of assessment” test evaluates the tendency of assessments to be at, above, or below market value. It is especially useful in determining the proportional equity of the tax revenue contributions of counties to the Uniform School Fund. The mean and the median are used to estimate the countywide level of assessment for each of four classes of property: primary residential, secondary residential, commercial, and vacant land properties. The dollar-weighted mean (DWM) is also calculated to aid in the analysis of assessment levels.

Second, the “uniformity” test addresses the degree of variability of assessments, whether tightly grouped near the average level of assessment or widely dispersed above and below. Uniformity is measured statistically using the coefficient of dispersion (COD) and the coefficient of variation (COV). These measures are important in evaluating assessment performance because they indicate how consistently property is being assessed within a specific county. A high degree of dispersion among ratios indicates a lack of equity in assessments.

The mean and the median are not only used to measure the level of assessment countywide, but also to measure uniformity or equity *within* each county. This is accomplished through the process of “stratification,” where the four classes of property listed above are stratified into smaller samples to identify specific valuation characteristics.

The level of assessment and the uniformity within each county must comply with the standards set forth in Administrative Rule R884-24P-27. The complete rule text is reprinted in Appendix V. The State Commission may order a county to take corrective action in the case of non-compliance.⁷ Corrective action orders are designed to address specific valuation problems, while minimizing any adverse impact the action may have on assessments that meet standard.

⁴ Utah Code, §§59-2-704 & 704.5

⁵ Utah Administrative Code, R884-24P-27 & R861-1A-11

⁶ International Association of Assessing Officers, Sale Ratio Standards (Chicago: The International Association of Assessing Officers, 1999)

⁷ Utah Code, §59-2-704(2).

The 1999 Assessment/Sales Ratio Study is based on arms-length sales occurring from January 1, 1998 through December 31, 1998. Sales are selected primarily from qualified warranty deeds, supported by data received in response to questionnaires completed by the buyer of the property. Where samples are small for a given class of property, the study period may be extended. In extreme cases other analysis may be used to determine compliance. This would be accomplished through the evaluation of the county's assessment procedures and practices including local valuation guidelines, market data collection, or elements of training, resources, and funding.

Appraisals may be performed to supplement the sales data where sample size is small; however, for the 1999 study cycle, no appraisals were conducted, as sample size was adequate in all counties to measure performance.

METHODOLOGY

Overview

The sample for the study consists of properties that have recently sold. Two values are necessary to construct an assessment/sale ratio for a specific property. The first is the county's appraised market value, which is obtained from the county assessor's records. The second is the sale price of the property, which is obtained from buyers' responses to questionnaires or from other market sources. For purposes of this study, the terms "appraised market value" and "assessed value" are synonymous, meaning the assessor's fair market valuation before any exemptions or statutory reductions.

The assessed value is divided by the sale price to obtain each property's assessment/sale ratio. The entire sample of ratios is then analyzed statistically to evaluate a county's assessment performance.

Sale Data Collection

The study begins with the identification of properties that have sold. Recorded deeds are the basis for identifying potential sales to be included in the study. Questionnaires are mailed to the grantees listed on deeds to request information about the recorded transaction. In addition, sale data may be gathered from local multiple listing service reports where available and appropriate. Each sale transaction is screened and verified before it is considered to be an arms-length representation of the market. The following criteria are used to qualify recorded deeds for the study:

1. Deeds must be instruments of conveyance of real property.
2. In most cases they must be warranty deeds or special warranty deeds. In some cases quit claim deeds may be used if they represent a substantial portion of the market.

3. The instrument recordation date is between January 1, 1998 and December 31, 1998.

Up to two questionnaires are mailed to the person or persons listed as grantee for each deed.

Sale Data Cleaning

Returned questionnaires are screened and only arms-length market transactions qualify for inclusion in the study. Sold properties are classified into four general use types: primary residential, commercial, vacant land, and secondary residential (second homes or cabins). The following are reasons to exclude a sale from the study:

1. The sale occurred outside the current study period of January 1, 1998 to December 31, 1998. Where sales activity is limited, sales from prior periods may be used.
2. The sale was compulsory because of foreclosure, divorce, condemnation, etc.
3. The sale was between relatives, affiliated companies, or their officers.
4. The property was sold to or purchased from any church, fraternal, educational, or governmental organization.
5. Real estate in more than one county was involved.
6. A partial interest only was purchased or sold.
7. Possession by buyer was delayed for more than one year.
8. The sale was strictly a transfer of convenience, i.e. the creation of a family trust or the correction of a title.
9. The sale involved an unknowledgeable buyer or seller.
10. The sale involved a trade for which a value cannot be verified.
11. The sale included a significant amount of personal property for which a value cannot be verified.
12. The property involved mixed-use from among the four classifications.
13. Property was currently assessed under the Farmland Assessment Act.

14. The property was split or joined during 1998 and lacked a serial number or assessment as of January 1, 1999.

Matching Sale to Assessment

Care must be taken to achieve an accurate match between the property as it sold and the property as it was appraised by the county assessor to insure that an appropriate comparison can be made between the two. For example, after a home sells, the new owner may change the property by building additional living area. In that case the home in its new form no longer represents the property as it was on the date of sale. If the assessment occurs following the change, the sale and the assessment do not match and must be excluded from the study. On the other hand, if the assessment occurs prior to the change, then the ratio may be included in the study.

Another instance when it is necessary to carefully match the sale and assessment is when a major change in property use occurs after the date of sale. If the change in use could not have been readily anticipated by the assessor through highest and best use analysis, then the property that was assessed may not match the property that sold and may need to be excluded.

Adjustments to the Sale Price

Sale prices may require adjustment to ensure they represent only the value of the real estate under current market conditions. The following are conditions under which sale prices require adjustment:

1. The sale included a significant amount of personal property for which a value is known.
2. The market conditions on the date of sale were different than they were on January 1, 1999, and evidence supports a "time-adjustment."

Assessment Data

Assessed values are collected from the assessor's records along with the location and selected physical characteristics of each sold property. Location is identified first according to broad regions, then by smaller areas called districts, and finally by specific market areas called neighborhoods. Size of sold parcels is identified by number of acres. Improvement age, effective age and floor area is gathered. Since sales often involve multiple parcels in a transaction, care is taken to ensure that data for all parcels involved in the sale are identified and included.

Statistical Analysis

An assessment/sale ratio for each sold property in the sample is calculated by dividing the assessed value by the sale price. The ratios are then stratified into the four general

classes for analysis. Each class is further stratified into sub-classes based on location, age or effective age, and size. Statistics for sub-class stratifications form a basis for issuing corrective action orders, but are not reported here.

Three averages or measures of central tendency are analyzed: the median, the mean and the dollar-weighted mean (DWM). In addition, a 95% confidence interval is calculated around the median and the mean. Two measures of dispersion are analyzed as a test for uniformity: the coefficient of dispersion (COD) and the coefficient of variation (COV). Vertical equity is analyzed using the price-related differential (PRD).

The example in FIGURE 1 presents five individual assessment/sale ratios. Included are the parcel number, the assessed or appraised market value, and the sale price for each parcel. The individual ratios are computed by dividing each assessed value by its related sale price.

FIGURE 1

<u>PARCEL</u>	<u>ASSESSED VALUE</u>	<u>SALE PRICE</u>	<u>RATIO %</u>
1	\$88,000	\$101,000	87
2	67,000	63,000	106
3	59,000	58,000	102
4	72,000	72,500	99
5	52,000	54,000	96

The mean is the arithmetic average of the ratios and is calculated by summing the ratios and dividing by the number of ratios in that sample. The mean ratio in FIGURE 1 is calculated as follows: $87\% + 106\% + 102\% + 99\% + 96\% = 490\%$; then, $490\% \div 5 = 98\%$.

The median is simply the middle ratio of the sorted or arrayed assessment/sale ratios. If there is an even number of ratios, the median is the average of the middle two ratios. The median divides the data into two equal parts and is less affected by the extreme ratios on either side of the distribution than other measures of central tendency.

To find the median, the individual ratios in FIGURE 1 are arranged in order of magnitude from lowest to highest, then the middle ratio in the series is selected. This array is presented in FIGURE 2. The number of sales in this sample is odd; therefore the ratio of 99 is identified as the median or middle ratio.

FIGURE 2

<u>PARCEL</u>	<u>ASSESSED VALUE</u>	<u>SALE PRICE</u>	<u>RATIO%</u>
1	\$88,000	\$101,000	87
5	52,000	54,000	96
4	72,000	72,500	* 99
3	59,000	58,000	102
2	<u>67,000</u>	<u>63,000</u>	106
Totals:	\$338,000	\$348,500	

* The Median is the middle number in the array.

The DWM is calculated by dividing the sum of the county's appraised market values for the sold properties in the sample by the sum of the sale prices for those properties. The DWM doesn't give equal weight to each ratio; rather, it gives weight to each sale dollar and thus is more affected by ratios with high sales prices.

The dollar-weighted mean is calculated for FIGURE 2 by dividing the total of the county appraised values of \$338,000 by the total of the sale prices of \$348,500 = 97%.

Since a measure of central tendency simply calculates the average for one single instance, it is conceivable that each new sample, theoretically speaking, could produce a different measure of central tendency within a given range. In fact, the central tendency of the entire population that the samples represent can only be assumed to fall within a certain range. The wider the range, the more confident we become that the “true” measure of central tendency lies within it. This range is the confidence interval. For this study the 95% confidence interval is used, meaning we are 95% confident that the “true” measure of central tendency lies within it. A detailed presentation of the calculation of the 95% confidence intervals is presented in IAAO’s *Property Appraisal and Assessment Administration*.⁸

The COD is the average absolute deviation divided by the measure of central tendency. In this study the COD is calculated about the median. The average absolute deviation is defined as the sum of the absolute differences between the individual observations and the measure of central tendency, divided by the number of observations.

Calculation of the COD for the ratios in FIGURE 2 is illustrated in FIGURE 3 below.

FIGURE 3

<u>RATIO %</u>		<u>MEDIAN %</u>	<u>ABS. Deviation From MEDIAN</u>
87	-	99	12
96	-	99	3
99	-	99	0
102	-	99	3
106	-	99	<u>7</u>
			25
Total Deviation ÷ Number of Ratios = Average Deviation			
25 ÷ 5 = 5.0			
And:			
Average Deviation ÷ Median x 100 = COD			
(5.0 ÷ 99) x 100 = 5.05			

The COV is the standard deviation expressed as a percentage of the mean. The standard deviation is the square root of the variance. The variance is the summation of the squared deviations from the mean divided by the degrees of freedom (the number in the sample minus one).

8 International Association of Assessing Officers, *Property Appraisal and Assessment Administration* (Chicago: The International Association of Assessing Officers, 1999) pp. 608-609

Using the same ratios as above, the COV is calculated in FIGURE 4 below:

FIGURE 4

<u>RATIO %</u>		<u>MEAN %</u>	<u>(ABS. Deviation From MEAN)²</u>
87	-	98	121
96	-	98	4
99	-	98	1
102	-	98	16
106	-	98	<u>64</u>
			206
Sum of Squared Deviations ÷ (Number of Ratios – 1) = Variance			
$206 \div 4 = 51.5$			
$\sqrt{\text{Variance}} = \text{Standard Deviation}$			
$\sqrt{51.5} = 7.18$			
Standard Deviation ÷ Mean x 100 = COV			
$7.18 \div 98 \times 100 = 7.33$			

The PRD describes to what degree assessments are regressive or progressive. It is calculated by dividing the mean ratio by the dollar-weighted mean ratio. An assessment is said to be regressive if higher priced properties are under-assessed relative to lower priced properties. Conversely, a progressive assessment is when higher priced properties are over-assessed relative to lower priced properties. The PRD is typically expressed in decimal form. If the PRD is greater than 1, the assessment is regressive; if less than 1, it is progressive.

In the preceding examples, the mean ratio is 98% and the dollar-weighted mean ratio is 97%; therefore, the PRD is $0.98 \div 0.99 = 0.99$. This is very slightly regressive.

PERFORMANCE STANDARDS

The Tax Commission has adopted standards of performance developed primarily from those recommended by the IAAO.⁹ They are written in Administrative Rule R884-24P-27, which is reprinted in Appendix V. The standards are summarized in FIGURE 5:

⁹ International Association of Assessing Officers, Sale Ratio Standards (Chicago: The International Association of Assessing Officers, 1999)

FIGURE 5

County Size	Property Class	Minimum Sample Size	Mean or Median	COD	COV
Urban	Primary Residential	10	90 – 110%	15	19
	Commercial	10	90 – 110%	15	19
	Vacant Land	10	90 – 110%	20	25
	Secondary Residential	10	90 – 110%	20	25
Rural	Primary Residential	10	90 – 110%	20	25
	Commercial	10	90 – 110%	20	25
	Vacant Land	10	90 – 110%	25	31
	Secondary Residential	10	90 – 110%	25	31

Which statistical measures to use in the analysis depend on whether or not the sample ratios are normally distributed around the mean; in other words, whether or not the sample is parametric. If the sample is parametric, the mean and the COV are analyzed. If not, the median and COD are analyzed.

The first test for level of assessment compliance is whether the measure of central tendency is between 90% and 110% of market value. If the sample passes, analysis ends. If the sample fails that test, a second test is applied.

The second test looks at the COV or COD to determine the reliability of the sample. If the COV or COD passes standard, the county may be ordered to factor its corresponding assessments from the measure of central tendency to the legal level of assessment of 100 percent. If the COV or COD fails standard, the measure of central tendency is called into question. In that case a third test is applied.

The third test analyzes the confidence interval. If the confidence interval contains the legal level of assessment of 100 percent, the sample passes and analysis ends. If the legal level of assessment of 100 percent lies outside the confidence interval, a county may then be ordered to factor its corresponding assessments from the interval limit that is nearest 100 percent.

A test for uniformity of assessments is conducted only on properties that were reappraised during the current assessment cycle. This test analyzes the COV or COV. If the sample passes, analysis ends. If it fails, a county may be ordered to reappraise the properties again.

SELECTIVE REAPPRAISAL AUDITS

County assessments are audited to determine if the sold properties in the study have been assessed in the same manner as properties that have not sold. A sample from each group is analyzed by dividing the current year's assessments by the prior year's assessments. The ratio indicates the percent change in value for that group. If the percent change is similar for each group, uniform treatment of both groups is assumed to have taken place.

If the change in assessments for the two groups varies significantly, sold properties are assumed to have been “selectively” appraised, and corrective action may be ordered.

APPEAL OF CORRECTIVE ACTION ORDERS

Counties receiving orders to correct their assessments may appeal those orders pursuant to Administrative Rule R861-1A-11, presented in Appendix VI. The rule also allows the Property Tax Division adjust orders prior to a county’s official appeal or to enter into stipulations with counties subsequent to an appeal.

CORRECTIVE ACTION ORDERS BY COUNTY

The following pages summarize the corrective action orders issued by the Property Tax Division and any stipulations entered into between the Division and the respective counties. In many cases, problem areas were determined in a cooperative effort between the Property Tax Division and the respective county assessor. The analysis of small subsections of the data by the assessor and the Division allowed orders to be targeted to specific problem areas and avoided factoring areas that were in compliance.

Beaver County:

No Corrective Action Order issued.

Box Elder County:

No Corrective Action Order issued.

Cache County:

No Corrective Action Order issued.

Carbon County:

No Corrective Action Order issued.

Daggett County:

No Corrective Action Order issued.

Davis County:

No Corrective Action Order issued.

Duchesne County:

No Corrective Action Order issued.

Emery County:

No Corrective Action Order issued.

Garfield County:

Factor all secondary residential countywide by 1.32.

OR

Factor all secondary residential outside the 1998 reappraisal area by 1.15 or otherwise bring to current market value.

Grand County:

No corrective action orders.

Iron County:

No corrective action orders.

Juab County:

No corrective action orders.

Kane County:

No Corrective Action Order issued.

Millard County:

No Corrective Action Order issued.

Morgan County:

No Corrective Action Order issued.

Piute County:

No Corrective Action Order issued.

Rich County:

No Corrective Action Order issued.

Salt Lake County:

No Corrective Action Order issued.

San Juan County:

No Corrective Action Order issued.

Sanpete County:

Factor all vacant land countywide by 1.05 or otherwise bring to current market value.

Sevier County:

No Corrective Action Order issued.

Summit County:

We acknowledge the county's development of a detailed plan of action to bring its 2000 tax roll to current market value. (A copy of the county's plan is attached.) We commend the county's efforts. Implementation of the plan must achieve the following overall results:

All residential (excluding condominiums) in Area 1, Region 3 (in Park City): increase by a factor of 1.24 or otherwise bring to current market value.

All residential (excluding condominiums) in Area 4 (North Summit): increase by a factor of 1.22 or otherwise bring to current market value.

All condominiums in Area 1, District 91-2 (in Park City): increase by a factor of 1.19 or otherwise bring to current market value.

All condominiums in Area 1, District 91-6 (in Park City): increase by a factor of 1.19 or otherwise bring to current market value.

All condominiums in Area 1, District 91-9 (in Park City): increase by a factor of 1.23 or otherwise bring to current market value.

All vacant land in Area 1, Region 3 (in Park City): increase by a factor of 1.24 or otherwise bring to current market value.

All vacant land in Area 2 (Snyderville) greater than 5.00 acres in size: increase by a factor of 1.07 or otherwise bring to current market value.

All vacant land in Area 3 (South Summit): increase by a factor of 1.09 or otherwise bring to current market value.

Tooele County:

Factor all primary residential in Region 1, District 1 (Tooele) of year-built 1955 and older by 1.13.

Factor all primary residential in Region 1, District 7, Neighborhood 1 (in Stansbury Park) by 1.12.

Factor all vacant land in Region 2 (Stockton) by 1.79 or otherwise bring to current market value through reappraisal.

Uintah County:

No Corrective Action Order issued.

Utah County:

Stipulation:

Factor all residential property in Region 2, District 90 (Orem) by 1.07.

Factor all commercial property in Region 2, District 110 (Provo) by 1.11.

Factor all residential property in Region 2, District 110 (Provo) by 1.115.

Wasatch County:

Factor all primary residential in the Heber City lots and blocks of size 1000 square feet and less by 1.35

Or

Reappraise all primary residential in the Heber City lots and blocks.

Factor all vacant land in Region 4 and Interlaken Subdivision by 1.74 or otherwise bring to current market value through reappraisal. We acknowledge that the county currently has a reappraisal underway for vacant land in these areas for the 2000 tax roll.

Washington County:

Factor all vacant land in District 23 (Big Plain), excluding subdivisions, by 1.37 or otherwise bring to current market value.

Wayne County:

No Corrective Action Order issued.

Weber County:

Improved Properties:

Region 2: Factor primary residential *buildings only* built after 1945 by 1.17. Factor primary residential *buildings only* built prior to 1946 by 1.23.

Region 3: Factor primary residential *buildings only* built between 1946 and 1960 by 1.16. Factor primary residential *buildings only* built prior to 1946 by 1.22.

Region 4: Factor primary residential *buildings only* built after 1960 by 1.15. Factor primary residential *buildings only* built between 1946 and 1960 by 1.23.

Region 6: Factor primary residential *buildings only* built between 1946 and 1990 by 1.16. Factor primary residential *buildings only* built prior to 1946 by 1.31.

Land:

Region 3: Factor all land, *improved and vacant*, by 1.08.

Factor all land, *improved and vacant*, by 1.19 (or otherwise bring to current market value through reappraisal) in the following specific subdivisions: in Neighborhood 503, Pheasant Place, Bayview Park, Jackson Acres; in Neighborhood 515, Connole Acres, Mahas, Bell Acres; in Neighborhood 537, Plain City Meadows, Heritage Estates.

TABLE 1 All Property Classes

County	Property Class	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
BEAVER	1 RESIDENTIAL	27	1.02	94.0%	101.0%	99.0%	86.0%	12.4	103.0%	97.0%	90.0%	17.6	Yes
	2 COMMERCIAL	0											
	3 VACANT LAND	39	1.02	89.0%	97.0%	89.0%	83.0%	15.0	96.0%	91.0%	85.0%	19.2	Yes
	4 SECONDARY RES.	6											
BOX ELDER	1 RESIDENTIAL	316	1.01	97.7%	100.3%	97.7%	96.2%	12.1	100.2%	98.3%	96.4%	17.4	No
	2 COMMERCIAL	11	0.72	117.3%	128.0%	76.3%	41.2%	33.9	108.4%	84.9%	61.3%	41.8	yes
	3 VACANT LAND	87	1.01	95.0%	100.3%	99.2%	96.2%	11.6	99.2%	95.8%	92.7%	16.0	Yes
	4 SECONDARY RES.	0											
CACHE	1 RESIDENTIAL	775	1.00	96.2%	96.8%	96.1%	95.5%	7.9	97.3%	96.6%	95.8%	11.0	No
	2 COMMERCIAL	22	1.01	95.8%	100.9%	91.5%	85.6%	14.2	105.6%	96.8%	87.9%	20.6	Yes
	3 VACANT LAND	126	1.03	94.5%	100.0%	96.3%	92.3%	16.0	101.8%	97.6%	93.5%	24.5	No
	4 SECONDARY RES.	0											
CARBON	1 RESIDENTIAL	103	1.04	88.1%	91.7%	88.0%	83.1%	20.3	97.2%	92.0%	86.8%	28.7	No
	2 COMMERCIAL	5											
	3 VACANT LAND	32	1.06	92.6%	102.2%	100.0%	73.5%	22.9	109.2%	98.0%	86.8%	31.6	Yes
	4 SECONDARY RES.	0											
DAGGETT	1 RESIDENTIAL	included in secondary res.											
	2 COMMERCIAL	1											
	3 VACANT LAND	18	1.07	77.0%	105.0%	92.0%	85.0%	14.9	104.0%	95.0%	86.0%	30.0	No
	4 SECONDARY RES.	10	1.15	87.0%	150.0%	96.0%	67.0%	22.4	124.0%	100.0%	76.0%	29.9	Yes

County	Property Class	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
DAVIS	1 RESIDENTIAL	227	0.99	97.0%	99.0%	97.0%	95.0%	10.1	98.0%	97.0%	95.0%	13.6	Yes
	2 COMMERCIAL	12	1.40	53.0%	137.0%	67.0%	34.0%	43.7	101.0%	75.0%	50.0%	54.1	Yes
	3 VACANT LAND	20	1.08	89.0%	103.0%	100.0%	81.0%	9.9	101.0%	95.0%	89.0%	13.9	Yes
	4 SECONDARY RES.	0											
DUCHESNE	1 RESIDENTIAL	64	2.20	42.0%	97.0%	93.0%	89.0%	11.0	95.0%	92.0%	89.0%	13.8	Yes
	2 COMMERCIAL	4											
	3 VACANT LAND	92	0.94	97.0%	91.0%	87.0%	79.0%	21.6	97.0%	91.0%	85.0%	30.8	Yes
	4 SECONDARY RES.	18			98.0%	93.0%	72.0%	15.3	100.0%	90.0%	81.0%	20.9	Yes
EMERY	1 RESIDENTIAL	53	1.03	95.0%	104.0%	95.0%	90.0%	16.4	104.0%	98.0%	93.0%	20.8	yes
	2 COMMERCIAL	0											
	3 VACANT LAND	13	1.16	78.0%	133.0%	89.0%	33.0%	40.5	121.0%	90.0%	60.0%	56.1	yes
	4 SECONDARY RES.	0											
GARFIELD	1 RESIDENTIAL	19	1.10	83.0%	102.0%	81.0%	68.0%	25.7	106.0%	91.0%	75.0%	35.8	Yes
	2 COMMERCIAL	1											
	3 VACANT LAND	54	1.05	85.0%	98.0%	80.0%	65.0%	46.9	105.0%	89.0%	73.0%	66.6	Yes
	4 SECONDARY RES.	11	1.01	76.0%	108.0%	75.0%	71.0%	24.0	92.0%	76.0%	61.0%	31.2	Yes
GRAND	1 RESIDENTIAL	34	1.00	93.0%	95.0%	93.0%	88.0%	9.8	98.0%	93.0%	89.0%	11.0	Yes
	2 COMMERCIAL	5											
	3 VACANT LAND	25	1.05	87.0%	98.0%	95.0%	86.0%	8.7	96.0%	91.0%	87.0%	12.2	Yes
	4 SECONDARY RES.	0											
IRON	1 RESIDENTIAL	209	1.01	95.0%	101.0%	96.0%	99.0%	10.7	97.0%	95.0%	93.0%	15.0	No
	2 COMMERCIAL	6											
	3 VACANT LAND	184	1.09	87.0%	96.0%	95.0%	109.0%	18.3	99.0%	96.0%	92.0%	25.7	No
	4 SECONDARY RES.	58	1.05	93.0%	105.0%	97.0%	97.0%	9.0	101.0%	98.0%	94.0%	13.1	Yes

County	Property Class	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
JUAB	1 RESIDENTIAL	41	1.01	93.0%	98.0%	94.0%	91.0%	10.5	98.0%	94.0%	89.0%	15.2	Yes
	2 COMMERCIAL	0											
	3 VACANT LAND	26	1.12	81.0%	100.0%	86.0%	63.0%	36.8	116.0%	91.0%	66.0%	68.8	Yes
	4 SECONDARY RES.	0											
KANE	1 RESIDENTIAL	48	1.00	95.0%	108.0%	93.0%	93.0%	18.7	101.0%	95.0%	88.0%	23.7	Yes
	2 COMMERCIAL	3											
	3 VACANT LAND	57	1.14	82.0%	95.0%	91.0%	83.0%	25.4	101.0%	94.0%	86.0%	30.2	No
	4 SECONDARY RES.	included in primary											
MILLARD	1 RESIDENTIAL	42	1.14	89.0%	103.0%	96.0%	84.0%	22.6	111.0%	102.0%	93.0%	27.9	Yes
	2 COMMERCIAL	2											
	3 VACANT LAND	19	12.06	9.0%	106.0%	90.0%	75.0%	43.2	124.0%	104.0%	84.0%	55.6	Yes
	4 SECONDARY RES.	1											
MORGAN	1 RESIDENTIAL	40	1.01	93.0%	100.0%	95.0%	86.4%	11.5	98.8%	94.3%	89.8%	15.0	Yes
	2 COMMERCIAL	0											
	3 VACANT LAND	17	1.02	93.3%	108.7%	98.6%	81.9%	12.9	103.9%	95.4%	87.0%	17.3	Yes
	4 SECONDARY RES.	0											
PIUTE	1 RESIDENTIAL	23	1.04	98.0%	114.0%	101.0%	94.0%	13.2	111.0%	102.0%	94.0%	19.0	No
	2 COMMERCIAL	0											
	3 VACANT LAND	12	1.33	91.0%	175.0%	125.0%	59.0%	26.1	148.0%	121.0%	94.0%	35.4	Yes
	4 SECONDARY RES.	8											
RICH	1 RESIDENTIAL	68	1.02	87.5%	100.5%	93.6%	78.9%	20.5	94.5%	88.9%	83.3%	26.1	Yes
	2 COMMERCIAL	2											
	3 VACANT LAND	105	1.27	76.7%	100.0%	95.2%	86.4%	29.7	104.9%	97.2%	89.5%	40.9	Yes
	4 SECONDARY RES.	included in primary											

County	Property Class	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
SALT LAKE	1 RESIDENTIAL	5787	1.01	98.0%	99.2%	99.0%	98.8%	5.4	98.9%	98.7%	98.5%	7.3	No
	2 COMMERCIAL	125	1.03	94.2%	100.1%	99.9%	98.5%	12.9	100.9%	97.3%	93.6%	21.5	No
	3 VACANT LAND	113	0.99	93.9%	94.3%	92.0%	89.4%	14.1	96.1%	92.8%	89.5%	19.3	Yes
	4 SECONDARY RES.	0											
SAN JUAN	1 RESIDENTIAL	29	1.05	81.0%	96.0%	77.0%	67.0%	28.7	97.0%	85.0%	73.0%	37.2	Yes
	2 COMMERCIAL	0											
	3 VACANT LAND	34	1.06	68.0%	106.0%	77.0%	63.0%	36.9	100.0%	87.0%	74.0%	42.6	Yes
	4 SECONDARY RES.	0											
SANPETE	1 RESIDENTIAL	79	1.03	93.0%	99.0%	93.0%	83.0%	19.6	102.0%	96.0%	91.0%	26.0	Yes
	2 COMMERCIAL	7											
	3 VACANT LAND	111	1.52	69.0%	95.0%	88.0%	82.0%	57.4	123.0%	105.0%	87.0%	90.7	Yes
	4 SECONDARY RES.	9											
SEVIER	1 RESIDENTIAL	143	1.02	99.2%	100.1%	99.6%	101.6%	15.2	104.6%	100.8%	97.0%	23.1	No
	2 COMMERCIAL	4											
	3 VACANT LAND	60	1.07	93.0%	104.0%	98.0%	93.0%	23.4	108.0%	100.0%	91.0%	32.5	Yes
	4 SECONDARY RES.	3											
SUMMIT	1 RESIDENTIAL	532	1.01	91.9%	94.2%	93.7%	91.9%	10.1	94.2%	92.9%	91.5%	17.5	No
	2 COMMERCIAL	10	0.96	66.9%	96.0%	57.5%	45.8%	17.9	79.5%	64.5%	49.5%	27.0	Yes
	3 VACANT LAND	387	1.06	85.3%	94.5%	92.4%	90.1%	19.0	93.0%	90.4%	87.9%	28.6	No
	4 SECONDARY RES.	74	1.01	89.9%	94.6%	92.0%	89.1%	12.5	94.3%	90.4%	86.5%	18.5	yes
TOOELE	1 RESIDENTIAL	216	1.00	94.0%	96.0%	94.0%	9.0%	10.7	96.0%	95.0%	93.0%	15.3	No
	2 COMMERCIAL	3											
	3 VACANT LAND	57	1.03	94.7%	104.1%	103.7%	95.2%	13.8	103.0%	97.7%	92.4%	20.5	Yes
	4 SECONDARY RES.	4											

County	Property Class	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
UINTAH	1 RESIDENTIAL	129	1.06	97.0%	100.0%	99.0%	98.0%	14.7	112.0%	103.0%	95.0%	15.1	Yes
	2 COMMERCIAL	12	0.97	91.0%	102.0%	98.0%	57.0%	23.1	110.0%	88.0%	67.0%	38.5	No
	3 VACANT LAND	10	1.00	99.0%	101.0%	100.0%	95.0%	1.9	101.0%	99.0%	97.0%	2.3	Yes
	4 SECONDARY RES.	0											
UTAH	1 RESIDENTIAL	117	1.01	93.2%	99.6%	93.2%	91.6%	16.3	98.3%	93.9%	89.6%	25.2	No
	2 COMMERCIAL	74	1.17	78.8%	92.5%	83.9%	67.7%	45.2	108.0%	92.0%	76.0%	74.7	Yes
	3 VACANT LAND	92	1.23	65.3%	91.8%	78.5%	73.9%	35.6	88.5%	80.4%	72.3%	48.3	Yes
	4 SECONDARY RES.	0											
WASATCH	1 RESIDENTIAL	103	1.00	91.5%	96.3%	94.5%	90.7%	12.0	94.0%	91.1%	88.2%	16.3	no
	2 COMMERCIAL	5											
	3 VACANT LAND	139	0.99	90.3%	99.8%	96.6%	91.2%	16.8	93.1%	89.3%	85.5%	25.7	no
	4 SECONDARY RES.	22	0.97	82.9%	89.5%	80.0%	75.2%	17.1	88.7%	80.6%	72.5%	22.7	Yes
WASHINGTON	1 RESIDENTIAL	1931	1.01	95.6%	96.6%	96.1%	95.7%	8.1	97.0%	96.6%	96.1%	11.4	Yes
	2 COMMERCIAL	28	1.12	83.6%	104.9%	97.6%	86.5%	20.6	104.8%	93.8%	82.8%	30.2	Yes
	3 VACANT LAND	756	1.09	92.3%	99.6%	98.7%	98.1%	16.0	102.6%	100.4%	98.2%	31.0	No
	4 SECONDARY RES.	0											
WAYNE	1 RESIDENTIAL	12	1.11	79.0%	98.0%	82.0%	60.0%	25.6	109.0%	87.0%	65.0%	40.0	Yes
	2 COMMERCIAL	1											
	3 VACANT LAND	29	1.17	82.0%	103.0%	95.0%	82.0%	25.7	110.0%	97.0%	84.0%	35.7	Yes
	4 SECONDARY RES.	1											
WEBER	1 RESIDENTIAL	1299	0.99	90.2%	89.5%	88.7%	88.0%	10.2	91.6%	89.4%	87.1%	13.0	No
	2 COMMERCIAL	23	1.04	84.9%	95.8%	87.5%	82.8%	12.4	108.5%	88.7%	68.9%	17.3	Yes
	3 VACANT LAND	134	1.01	92.2%	100.0%	94.3%	91.4%	13.9	100.4%	93.4%	86.3%	19.8	No
	4 SECONDARY RES.	0											

TABLE 2 Primary Residential Property

County	Sample	PRD	DWM	Upper Limit	Median	Lower Limit	COD	Upper Limit	Mean	Lower Limit	COV	Normal Distrib
BEAVER	27	1.02	94.0%	101.0%	99.0%	86.0%	12.4	103.0%	97.0%	90.0%	17.6	Yes
BOX ELDER	316	1.01	97.7%	100.3%	97.7%	96.2%	12.1	100.2%	98.3%	96.4%	17.4	No
CACHE	775	1.00	96.2%	96.8%	96.1%	95.5%	7.9	97.3%	96.6%	95.8%	11.0	No
CARBON	103	1.04	88.1%	91.7%	88.0%	83.1%	20.3	97.2%	92.0%	86.8%	28.7	No
DAGGETT	included in secondary res.											
DAVIS	227	0.99	97.0%	99.0%	97.0%	95.0%	10.1	98.0%	97.0%	95.0%	13.6	Yes
DUCHESNE	64	2.20	42.0%	97.0%	93.0%	89.0%	11.0	95.0%	92.0%	89.0%	13.8	Yes
EMERY	53	1.03	95.0%	104.0%	95.0%	90.0%	16.4	104.0%	98.0%	93.0%	20.8	yes
GARFIELD	19	1.10	83.0%	102.0%	81.0%	68.0%	25.7	106.0%	91.0%	75.0%	35.8	Yes
GRAND	34	1.00	93.0%	95.0%	93.0%	88.0%	9.8	98.0%	93.0%	89.0%	11.0	Yes
IRON	209	1.01	95.0%	101.0%	96.0%	99.0%	10.7	97.0%	95.0%	93.0%	15.0	No
JUAB	41	1.01	93.0%	98.0%	94.0%	91.0%	10.5	98.0%	94.0%	89.0%	15.2	Yes
KANE	48	1.00	95.0%	108.0%	93.0%	93.0%	18.7	101.0%	95.0%	88.0%	23.7	Yes
MILLARD	42	1.14	89.0%	103.0%	96.0%	84.0%	22.6	111.0%	102.0%	93.0%	27.9	Yes
MORGAN	40	1.01	93.0%	100.0%	95.0%	86.4%	11.5	98.8%	94.3%	89.8%	15.0	Yes
PIUTE	23	1.04	98.0%	114.0%	101.0%	94.0%	13.2	111.0%	102.0%	94.0%	19.0	No
RICH	68	1.02	87.5%	100.5%	93.6%	78.9%	20.5	94.5%	88.9%	83.3%	26.1	Yes
SALT LAKE	5787	1.01	98.0%	99.2%	99.0%	98.8%	5.4	98.9%	98.7%	98.5%	7.3	No
SAN JUAN	29	1.05	81.0%	96.0%	77.0%	67.0%	28.7	97.0%	85.0%	73.0%	37.2	Yes
SANPETE	79	1.03	93.0%	99.0%	93.0%	83.0%	19.6	102.0%	96.0%	91.0%	26.0	Yes
SEVIER	143	1.02	99.2%	100.1%	99.6%	101.6%	15.2	104.6%	100.8%	97.0%	23.1	No
SUMMIT	532	1.01	91.9%	94.2%	93.7%	91.9%	10.1	94.2%	92.9%	91.5%	17.5	No
TOOELE	216	1.00	94.0%	96.0%	94.0%	9.0%	10.7	96.0%	95.0%	93.0%	15.3	No
UINTAH	129	1.06	97.0%	100.0%	99.0%	98.0%	14.7	112.0%	103.0%	95.0%	15.1	Yes
UTAH	117	1.01	93.2%	99.6%	93.2%	91.6%	16.3	98.3%	93.9%	89.6%	25.2	No
WASATCH	103	1.00	91.5%	96.3%	94.5%	90.7%	12.0	94.0%	91.1%	88.2%	16.3	no
WASHINGTON	1931	1.01	95.6%	96.6%	96.1%	95.7%	8.1	97.0%	96.6%	96.1%	11.4	Yes
WAYNE	12	1.11	79.0%	98.0%	82.0%	60.0%	25.6	109.0%	87.0%	65.0%	40.0	Yes
WEBER	1299	0.99	90.2%	89.5%	88.7%	88.0%	10.2	91.6%	89.4%	87.1%	13.0	No

TABLE 3 Commercial Property

<i>County</i>	<i>Sample</i>	<i>PRD</i>	<i>DWM</i>	<i>Upper Limit</i>	<i>Median</i>	<i>Lower Limit</i>	<i>COD</i>	<i>Upper Limit</i>	<i>Mean</i>	<i>Lower Limit</i>	<i>COV</i>	<i>Normal Distrib</i>
BEAVER	0											
BOX ELDER	11	0.72	117.3%	128.0%	76.3%	41.2%	33.9	108.4%	84.9%	61.3%	41.8	yes
CACHE	22	1.01	95.8%	100.9%	91.5%	85.6%	14.2	105.6%	96.8%	87.9%	20.6	Yes
CARBON	5											
DAGGETT	1											
DAVIS	12	1.40	53.0%	137.0%	67.0%	34.0%	43.7	101.0%	75.0%	50.0%	54.1	Yes
DUCHESNE	4											
EMERY	0											
GARFIELD	1											
GRAND	5											
IRON	6											
JUAB	0											
KANE	3											
MILLARD	2											
MORGAN	0											
PIUTE	0											
RICH	2											
SALT LAKE	125	1.03	94.2%	100.1%	99.9%	98.5%	12.9	100.9%	97.3%	93.6%	21.5	No
SAN JUAN	0											
SANPETE	7											
SEVIER	4											
SUMMIT	10	0.96	66.9%	96.0%	57.5%	45.8%	17.9	79.5%	64.5%	49.5%	27.0	Yes
TOOELE	3											
UINTAH	12	0.97	91.0%	102.0%	98.0%	57.0%	23.1	110.0%	88.0%	67.0%	38.5	No
UTAH	74	1.17	78.8%	92.5%	83.9%	67.7%	45.2	108.0%	92.0%	76.0%	74.7	Yes
WASATCH	5											
WASHINGTON	28	1.12	83.6%	104.9%	97.6%	86.5%	20.6	104.8%	93.8%	82.8%	30.2	Yes
WAYNE	1											
WEBER	23	1.04	84.9%	95.8%	87.5%	82.8%	12.4	108.5%	88.7%	68.9%	17.3	Yes

TABLE 4 Vacant Land

<i>County</i>	<i>Sample</i>	<i>PRD</i>	<i>DWM</i>	<i>Upper Limit</i>	<i>Median</i>	<i>Lower Limit</i>	<i>COD</i>	<i>Upper Limit</i>	<i>Mean</i>	<i>Lower Limit</i>	<i>COV</i>	<i>Normal Distrib</i>
BEAVER	39	1.02	89.0%	97.0%	89.0%	83.0%	15.0	96.0%	91.0%	85.0%	19.2	Yes
BOX ELDER	87	1.01	95.0%	100.3%	99.2%	96.2%	11.6	99.2%	95.8%	92.7%	16.0	Yes
CACHE	126	1.03	94.5%	100.0%	96.3%	92.3%	16.0	101.8%	97.6%	93.5%	24.5	No
CARBON	32	1.06	92.6%	102.2%	100.0%	73.5%	22.9	109.2%	98.0%	86.8%	31.6	Yes
DAGGETT	18	1.07	77.0%	105.0%	92.0%	85.0%	14.9	104.0%	95.0%	86.0%	30.0	No
DAVIS	20	1.08	89.0%	103.0%	100.0%	81.0%	9.9	101.0%	95.0%	89.0%	13.9	Yes
DUCHESNE	92	0.94	97.0%	91.0%	87.0%	79.0%	21.6	97.0%	91.0%	85.0%	30.8	Yes
EMERY	13	1.16	78.0%	133.0%	89.0%	33.0%	40.5	121.0%	90.0%	60.0%	56.1	yes
GARFIELD	54	1.05	85.0%	98.0%	80.0%	65.0%	46.9	105.0%	89.0%	73.0%	66.6	Yes
GRAND	25	1.05	87.0%	98.0%	95.0%	86.0%	8.7	96.0%	91.0%	87.0%	12.2	Yes
IRON	184	1.09	87.0%	96.0%	95.0%	109.0%	18.3	99.0%	96.0%	92.0%	25.7	No
JUAB	26	1.12	81.0%	100.0%	86.0%	63.0%	36.8	116.0%	91.0%	66.0%	68.8	Yes
KANE	57	1.14	82.0%	95.0%	91.0%	83.0%	25.4	101.0%	94.0%	86.0%	30.2	No
MILLARD	19	12.06	9.0%	106.0%	90.0%	75.0%	43.2	124.0%	104.0%	84.0%	55.6	Yes
MORGAN	17	1.02	93.3%	108.7%	98.6%	81.9%	12.9	103.9%	95.4%	87.0%	17.3	Yes
PIUTE	12	1.33	91.0%	175.0%	125.0%	59.0%	26.1	148.0%	121.0%	94.0%	35.4	Yes
RICH	105	1.27	76.7%	100.0%	95.2%	86.4%	29.7	104.9%	97.2%	89.5%	40.9	Yes
SALT LAKE	113	0.99	93.9%	94.3%	92.0%	89.4%	14.1	96.1%	92.8%	89.5%	19.3	Yes
SAN JUAN	34	1.06	68.0%	106.0%	77.0%	63.0%	36.9	100.0%	87.0%	74.0%	42.6	Yes
SANPETE	111	1.52	69.0%	95.0%	88.0%	82.0%	57.4	123.0%	105.0%	87.0%	90.7	Yes
SEVIER	60	1.07	93.0%	104.0%	98.0%	93.0%	23.4	108.0%	100.0%	91.0%	32.5	Yes
SUMMIT	387	1.06	85.3%	94.5%	92.4%	90.1%	19.0	93.0%	90.4%	87.9%	28.6	No
TOOELE	57	1.03	94.7%	104.1%	103.7%	95.2%	13.8	103.0%	97.7%	92.4%	20.5	Yes
UINTAH	10	1.00	99.0%	101.0%	100.0%	95.0%	1.9	101.0%	99.0%	97.0%	2.3	Yes
UTAH	92	1.23	65.3%	91.8%	78.5%	73.9%	35.6	88.5%	80.4%	72.3%	48.3	Yes
WASATCH	139	0.99	90.3%	99.8%	96.6%	91.2%	16.8	93.1%	89.3%	85.5%	25.7	no
WASHINGTON	756	1.09	92.3%	99.6%	98.7%	98.1%	16.0	102.6%	100.4%	98.2%	31.0	No
WAYNE	29	1.17	82.0%	103.0%	95.0%	82.0%	25.7	110.0%	97.0%	84.0%	35.7	Yes
WEBER	134	1.01	92.2%	100.0%	94.3%	91.4%	13.9	100.4%	93.4%	86.3%	19.8	No

TABLE 5 Secondary Residential Property

<i>County</i>	<i>Sample</i>	<i>PRD</i>	<i>DWM</i>	<i>Upper Limit</i>	<i>Median</i>	<i>Lower Limit</i>	<i>COD</i>	<i>Upper Limit</i>	<i>Mean</i>	<i>Lower Limit</i>	<i>COV</i>	<i>Normal Distrib</i>
BEAVER	6											
BOX ELDER	0											
CACHE	0											
CARBON	0											
DAGGETT	10	1.15	87.0%	150.0%	96.0%	67.0%	22.4	124.0%	100.0%	76.0%	29.9	Yes
DAVIS	0											
DUCHESNE	18			98.0%	93.0%	72.0%	15.3	100.0%	90.0%	81.0%	20.9	Yes
EMERY												
GARFIELD	11	1.01	76.0%	108.0%	75.0%	71.0%	24.0	92.0%	76.0%	61.0%	31.2	Yes
GRAND	0											
IRON	58	1.05	93.0%	105.0%	97.0%	97.0%	9.0	101.0%	98.0%	94.0%	13.1	Yes
JUAB	0											
KANE	included in primary											
MILLARD	1											
MORGAN	0											
PIUTE	8											
RICH	included in primary											
SALT LAKE	0											
SAN JUAN	0											
SANPETE	9											
SEVIER	3											
SUMMIT	74	1.01	89.9%	94.6%	92.0%	89.1%	12.5	94.3%	90.4%	86.5%	18.5	yes
TOOELE	4											
UINTAH	0											
UTAH	0											
WASATCH	22	0.97	82.9%	89.5%	80.0%	75.2%	17.1	88.7%	80.6%	72.5%	22.7	Yes
WASHINGTON	0											
WAYNE	1											
WEBER	0											

APPENDICES

1. First Solicitation Letter
2. Second Solicitation Letter Questionnaire
3. Real Property Transfer Survey
4. Screening Criteria
5. Tax Commission Rule R884-24P-27, Standards for Assessment Level Performance
6. Tax Commission Rule R861-1A-11, Procedures for Appeal of Factor Orders
7. Statutory Basis for Study - Section 59-2-704, UCA 1953 as amended
8. Statutory Basis for Standards - Section 59-2-704.5, UCA 1953, as amended
9. Statutory Basis for Mandatory Cyclical Appraisals - Section 59-2-303.1, UCA, as amended

September 20, 1998

Dear Property Owner:

The laws of the State of Utah require this office to conduct a study each year to determine the relationship between assessed value and the current market value of all classes of real estate. Section 59-1-210(14) of the Utah Code empowers the Tax Commission to request information needed to ensure fair property taxation.

Public records indicate that you **bought (or sold)** real property during our study period. Please answer questions one (1) through eleven (11) concerning the transfer of the described property and return the 'Real Property Transfer Survey' form by **(October 5, 1998)**. **A prompt response will insure that you do not receive a second mailing of the questionnaire.**

If you have not been involved in a transaction which included exchange of monies, but **recently refinanced, corrected a defective title, created a family trust or added/deleted names on a deed**, it will only be necessary to complete question #7 of the survey. This question pertains to the reasons for the sale. Item **(G) Transfer of Convenience**, would be the applicable response for these types of transfers.

Postage paid, business reply envelope is enclosed for your convenience. Please include the reference number from the questionnaire on any correspondence. The information you supply will help ensure that property taxes are fair and equitable; and that each property pays its fair share of the cost of local government. If you need assistance, please call 297-3647 during normal business hours. If you are calling from outside of the Salt Lake area, you may call 1-800-662-4335, enter 1, 73647 (ext).

Sincerely,

Valuation Appraiser
Sales Ratio Studies
Property Tax Division

September 20, 1998

SECOND REQUEST

Dear Property Owner:

This office recently sent you a Real Property Transfer Survey regarding a real estate transaction to which you were a party. Our records indicate that **we have not yet received the completed survey.**

Utah law requires this office to conduct the study annually to determine the relationship between taxable value and the current market value of all classes of real estate. Utah Code Ann. Section 59-1-210(14) (Supp. 1987) empowers the Tax Commission to request information needed to ensure fair property taxation. The information you supply will help ensure that property taxes are fair and equitable.

Enclosed is a copy of the survey form recently sent to you. If you have not been involved in a transaction which included exchange of monies, **but recently refinanced, corrected a defective title, created a family trust or added/deleted names on a deed,** it will only be necessary to complete question #7 of the survey. This question pertains to the reasons for the sale. Item ***(G) Transfer of Convenience***, would be the applicable response for these types of transfers.

Please complete and return it by **(October 5, 1998)**, in the postage paid business reply envelope provided. If you have already returned the first survey, **please accept our thanks for your cooperation and discard this second request.** If you need assistance, please call 297-3647 during normal business hours. If you are calling from outside of the Salt Lake area, you may call 1-800-662-4335, enter 1, 73647 (ext).

Sincerely,

Valuation Appraiser
Sales Ratio Studies
Property Tax Division

REAL PROPERTY TRANSFER SURVEY

Utah State Tax Commission TC-221

RETURN USTC, PROPERTY TAX DIVISION
TO 210 NORTH 1950 WEST
SALT LAKE CITY, UT. 84134

-PT-- GRANTEE: AA 12345679 -----

----- Please return by: -----

>>>> June 25, 1995

REFERENCE NUMBER: AA 1234 5679

SERIAL NUMBER:

SERIES: 1 COUNTY:

ACCOUNT: 0

SEQ.: 0

----- GRANTOR: (Seller) -----

----- LEGAL: (May Not All Print) --

0-

1. Address/location of property (approximate if necessary)

(street) (city or area) (county)

2. In this sale, what was the:

A. Date of sale

SALE PRICE OF: (month/year)

B. Land/buildings \$

C. Personal Property (if any) \$

(i.e. machinery, inventory, water rights, etc.)

Specify Any Personal Property:

D. Total Sale Price (B + C) \$

DOWN PAYMENT: \$

E. Down Payment Cash \$

F. Down Payment Other (if any) \$

(i.e. jewelry, coins, sweat equity, etc.)

Specify Any Down Payment Other:

3. Specify any trade of real estate in this transaction.

A. Type of property

B. Agreed upon value (if any) \$

4. Circle the letter of the category below that best describes property included in the sale price.

A. Vacant land, residential lot, or recreational lot

B. Vacant commercial land

C. Residence

D. Mobile home and lot

E. Apartment building

F. Commercial land and building(s)

G. Agricultural land only

H. Agricultural land and building(s)

I. Cabin or summer home (seasonal use only)

J. Other:

5. If use of the property has changed since time of sale, enter new use (use letter from list in #4).

6. Explain any reason this sale may not have been a "fair market value" transaction.

7. Circle the letter(s) of the following that apply to this sale.

A. This was a forced transaction because of foreclosure, divorce, court order, condemnation, probate, etc.

B. Sale was between relatives, affiliated companies or officers.

C. Property was sold to or purchased from any church, fraternal, educational, or governmental organization.

D. Real estate in more than one county was involved in this sale.

E. Partial interest only was purchased or sold.

F. Possession by buyer was delayed for more than one year from date of deed.

G. A transfer of convenience (i.e. refinance, correct defective title, create family trust, add/delete names on deed, etc.)

H. None of the above.

8. Circle the letter(s) indicating the types of financing used in this sale (circle all that apply).

A. Conventional

F. Farmer's Home Loan

B. Graduated payment

G. Utah Housing Authority

C. Adjustable rate mortgage

H. Assumption of mortgage

D. FHA

I. Seller financing

E. VA

J. Cash

9. Please give financing details if known.

Amount Financed \$ Interest Rate %

Length of Loan (yrs.) Explain if Necessary

10. Was sale handled through a real estate agent or broker? _____

If yes, name of agent or broker _____

11. In the event we need to contact you about this survey, please list your name, phone number, and best time to be reached.

print name

phone

best time

Thank you for taking a moment to answer these questions. Your help in obtaining thorough & accurate sales information is appreciated.

These answers are, to the best of my knowledge, true and correct.

Signature

Date

SCREENING CRITERIA

The existence of any of the following conditions will cause a sale to be eliminated from the study.

1. Sales involving a trade or exchange of property or loan assumption and where no specific value can be determined for the property traded and exchanged or the loan balance assumed.
2. Sales by the sheriff or other county officials; other forced sales.
3. Sales for which the improvements sold are not included in the assessment or the assessment included an improvement value for an improvement built after the sale.
4. Sales to or by the federal government, state or local government, or utilities.
5. Sales that included personal property and no specific value amount were assigned to the personal property.
6. Sales of minerals or timber only, or rights to mines or timber cuts.
7. Sales between known affiliated companies or corporations, or between companies or corporations and their officers, principles, etc.
8. Sales of cemetery lots and other exempted property.
9. Sales involving real estate located in more than one county.
10. Sales to or by any church, lodge, school, or other benevolent, fraternal, or education organization.
11. Sales conveying an unspecified, undivided, or fractional interest in property or merely conveying a life estate where such interest is not separately assessed.
12. Sales in which the seller retains possession of the property for over one year from the transaction date as stated on the deed.
13. Sales in which the seller retains a lease on the property for over one year from the transaction date as stated on the deed.
14. The instrument recorded describes an easement.

TAX COMMISSION RULE R884-24P-27

R884-24P-27. Standards for Assessment Level and Uniformity of Performance Pursuant to Utah Code Ann. Section 59-2-704.5.

A. "Urban counties" means counties classified as first or second class counties pursuant to Section 17-16-13.

B. The Tax Commission adopts the following standards of assessment performance regarding assessment level and uniformity:

1. Adjustment shall be ordered for a property class or subclass if the measure of central tendency is not within 10 percent of the legal level of assessment or the 95 percent confidence interval of the measure of central tendency does not contain the legal level of assessment.

a) The measure of central tendency shall be the mean for parametric samples and the median for nonparametric samples.

b) The adjustment shall be calculated by dividing the legal level of assessment by the measure of central tendency when uniformity meets the standards in B.2., or by the 95 percent confidence interval limit nearest the legal level of assessment when the standards in B.2. are not met.

2. Corrective action for the property being appraised under the cyclical appraisal plan for a given year shall be ordered if the measure of dispersion is outside the following limits for the coefficient of dispersion (COD), or for the coefficient of variation (COV) when data are normally distributed:

a) In urban counties, the limit for the COD is 15percent or less for primary residential and commercial property, and 20 percent or less for vacant land and secondary residential property.

b) In rural counties, the limit for the COD is 20 percent or less for primary residential and commercial property, and 25 percent or less for vacant land and secondary residential property.

c) The limit for the COV is 1.25 times the COD.

d) Corrective action may contain language requiring a county to create or follow its cyclical appraisal plan.

e) If the sample size does not meet the requirements of B.3., or if there is reason to question the reliability of statistical data achieved under B.3., an alternate performance evaluation shall be conducted, which may result in corrective action. The alternate performance evaluation shall include review and analysis of the following:

(1) The county's procedures for use and collection of market data, including sales, income, rental, expense, vacancy rates, and capitalization rates;

(2) The county-wide land, residential, and commercial valuation guidelines and their associated procedures for maintaining current market values;

(3) The accuracy and uniformity of the county's individual property data through a field audit of randomly selected properties;

(4) The county's level of personnel training, ratio of appraisers to parcels, level of funding, and other workload and resource considerations.

3. To achieve statistical accuracy in determining assessment level under B.1. and uniformity under B.2. for any property class or subclass, the acceptable sample size shall consist of 10 or more ratios.

a) To meet the minimum sample size, the study period may be extended.

b) A smaller sample size may be used if:

(1) that sample size is at least 10 percent of the class or subclass population:
or

APPENDIX V

- (2) both the Division and the county agree that the sample may produce statistics that infer corrective action appropriate to the class or subclass of property.
- c) If the Division, after consultation with the counties, determines that the sample size does not produce reliable statistical data, an alternate performance evaluation may be conducted, which may result in corrective action. The alternate performance evaluation shall include review and analysis of the following;
 - (1) The county's procedures for collection and use of market data, including sales, income, rental, expense, vacancy rates, and capitalization rates;
 - (2) The county-wide land, residential, and commercial valuation guidelines and their associated procedures for maintaining current market values;
 - (3) The accuracy and uniformity of the county's individual property data through a field audit of randomly selected properties; and
 - (4) The county's level of personnel training, ratio of appraisers to parcels, level of funding, and other workload and resource considerations.
- 4. All input to the sample used to measure performance shall be completed by September first of each study cycle.
- 5. Corrective action may contain language requiring a county to create or follow its cyclical appraisal plan.

C. The Tax Commission adopts the following procedures to insure compliance and facilitate implementation of ordered corrective action:

- 1. The Division shall retain authority to correct errors and, with agreement of the affected county, issue amended orders without Tax Commission approval. The Division may agree to any stipulation subsequent to an appeal subject to Tax Commission approval.
- 2. A county receiving a corrective action order resulting from this rule may file an appeal with the Tax Commission pursuant to Tax Commission rule R861-1A-11.
- 3. A corrective action order will become the final Tax Commission order if the county does not appeal in a timely manner, or does not prevail in the appeals process.
- 4. The Division may assist local jurisdictions to ensure implementation of any corrective action orders by the May 22 deadline.
- 5. The Division shall complete audits to determine compliance with corrective action orders as soon after the assessment roll closes on May 22 as practical. The Division shall review the results of the compliance audit with the county and make any necessary adjustments to the compliance audit by July 1 of each assessment cycle. These adjustments shall be limited to the analysis performed during the compliance audit and may not include review of the data used to arrive at the underlying factor order. After any adjustments, the compliance audit will then be given to the Tax Commission for any necessary action.
- 6. The county shall be informed of any adjustment required as a result of the compliance audit. Any required adjustment shall appear on the notice required under Section 59-2-919 (4) and Tax Commission rule R884-24P-24 for the current year. This notice shall not be mailed to taxpayers until required adjustments are implemented.

TAX COMMISSION RULE R861-1A-11

**R861-1A-11 Appeal of Factor Order Pursuant to Utah Code Ann.
59-2-704 (1953)
R861-1A-11 Administrative Procedures**

A. Appeal of Factor Order. Any county appealing a factor order issued pursuant to Utah Code Ann. Section 59-2-704(2), or any amendment initiated by the Commission to the order, shall, within 15 days of the mailing of an order to factor, request in writing a hearing before the Commission. The Commission shall immediately set the time and place of the hearing which shall be held no later than March 1 of the tax year to which the factor applies.

B. Hearings. Hearings on factor-order appeals shall be conducted as formal hearings and shall be governed by the procedures contained in these rules. If the parties are able to stipulate to a modification of the factor order, and it is evident that there is a reasonable basis for modifying the factor order, then an amended factor order may be executed by the Commission. One or more commissioners may preside at a hearing under this rule with the same force and effect as if a quorum of the Commission were present. However, a decision must be made and an order signed by a quorum of the Commission.

C. Decisions and Orders. The Commission shall render its decision and order no later than March 15. Upon reaching a decision, the Commission shall immediately notify the county assessor or if unavailable, his deputy, by telephone and shall confirm the order by mail. A county desiring to appeal the order must petition for reconsideration within ten days after the county assessor has been notified by telephone. No petition for reconsideration will be entertained unless evidence not reasonably available at the time of the hearing is to be presented. Oral argument on reconsideration will be heard only if the Commission determines it to be in the public interest. The Commission shall render a decision and order on a petition for reconsideration no later than March 31 and shall notify the county assessor by telephone and by mail.

D. Sales Information. Access to Commission property sales information shall be available by written agreement with the Commission to any county assessor appealing under this rule. All other reasonable and necessary information shall be available upon request, according to Commission guidelines.

E. Conflict with Other Rules. This rule supersedes all other rules which may otherwise govern such proceedings before the Commission.

STATUTORY BASIS FOR
ASSESSMENT/SALES RATIO STUDIES

SECTION 59-2-704

- (1) Each year, to assist in the evaluation of appraisal performance of taxable real property, the commission shall conduct and publish studies to determine the relationship between the market value shown on the assessment roll and the market value of real property in each county. The studies shall include measurements of uniformity within counties and use statistical methods established by the commission. County assessors may provide sales information to the commission for purposes of the studies. The commission shall make the sales and appraisal information related to the studies available to the assessors upon request.
- (2) The commission shall each year, order each county to adjust or factor its assessment rates using the most current studies so that the assessment rate in each county is in accordance with that prescribed in Section 59-2-103. The adjustment or factoring may include an entire county, geographical areas within a county, and separate classes of properties. Where significant value deviations occur, the commission shall also order corrective action.
- (3) If the commission determines that sales data in any county is insufficient to perform the studies required under Subsection (1), the commission may conduct appraisals of property within that county.
- (4) If a county fails to implement factoring or corrective action ordered under Subsection (2), the commission shall:
 - (a) implement the factoring or corrective action; and
 - (b) charge 100% of the reasonable implementation costs to that county.
- (5) If a county disputes the factoring or corrective action ordered under Subsection (2), the matter may be mediated by the Multicounty Appraisal Trust.
- (6) The commission may change the factor for any county which, after a hearing before the commission, establishes that the factor should properly be set at a different level for that county. The commission shall establish the method, procedure, and timetable for the hearings authorized under this section, including access to information to ensure a fair hearing. The commission may establish rules to implement this section.

STATUTORY BASIS FOR
STANDARDS OF ASSESSMENT LEVEL/UNIFORMITY

SECTION 59-2-704.5

- (1) In accordance with Title 63, Chapter 46a, Utah Administrative Rulemaking Act, and after receiving the advice of the Utah Assessors Association, the commission shall by rule adopt standards for determining acceptable assessment levels and valuation deviations within each county. The standards shall be used for determining whether factoring or corrective action is required under Subsection 59-2-704(2).
- (2) As part of its review of the standards for determining acceptable assessment levels and valuation deviations within each county, the commission shall consider any relevant standards promulgated by the International Association of Assessing Officers.
- (3) By October 1, 1998, and every five years thereafter, the Revenue and Taxation Interim Committee shall review the commission's standards and determine whether the standards should be modified.

STATUTORY BASIS FOR
MANDATORY CYCLICAL APPRAISALS

SECTION 59-2-303.1

(1) Beginning January 1, 1994, each county assessor shall annually update property values of property as provided in Section 59-2-301 based on a systematic review of current market data. In addition, the county assessor shall complete a detailed review of property characteristics for each property at least once every five years.

(a) The commission shall take corrective action if the commission determines that:

(i) a county assessor has not satisfactorily followed the current mass appraisal standards, as provided by law;

(ii) the sales-assessment ratio, coefficients of dispersion, or other statistical measures of appraisal performance related to the studies required by Section 59-2-704 are not within the standards provided by law; or

(iii) the county assessor has failed to comply with the requirements of Subsection (1).

(b) For purposes of this section, "corrective action" includes:

(i) factoring pursuant to Section 59-2-704;

(ii) notifying the state auditor that the county failed to comply with the requirements of this section; or

(iii) filing a petition for a court order requiring a county to take action.

(2) (a) By July 1, 1993, each county assessor shall prepare a five-year plan to comply with the requirements of Subsection (1).

(b) The plan shall be available in the county assessor's office for review by the public upon request.

(c) The plan shall be annually reviewed and revised as necessary.

Of particular importance in any sales ratio study is a clear understanding of the definitions used in the analysis. This is especially true for Utah because of the unique nature of some of its property tax laws.

Appraisal: An opinion by a qualified appraiser of the estimated value of real property. Elements of the analysis include: preliminary survey and planning; collection of data; application of cost, comparative sales, or income approaches; correlation and reconciliation of indicated values; and the final value estimate.

Arms-length Transaction: A real estate sale between two unrelated, knowledgeable parties, neither of whom is under abnormal pressure from the other and each is attempting to maximize his gains.

Assessment Level: The level of assessment after application of any fractional assessment ratio, partial exemption, or other adjustment.

Assessment Uniformity: The degree to which properties within a specific class or county are assessed at equal percentages of market value. Common measures of uniformity are the coefficient of dispersion and the coefficient of variation.

Coefficient of Dispersion (COD): The average absolute deviation of all assessment/sales ratios from the chosen measure of central tendency expressed as a percentage of the measure of central tendency. The lower the coefficient of dispersion, the more uniform are the assessments.

Coefficient of Variation (COV): The standard deviation expressed as a percentage of the mean.

Confidence Interval: An estimated range of values, which is expected to include the true population parameter (mean, median, COD) at a specified confidence level. It can be thought of as a measure of precision for the sample statistic or point estimate.

Confidence Level: The degree of probability associated with statistical test or confidence interval, commonly 90, 95, or 99 percent. For example, a 95 percent confidence interval would be expected to include the true population measure (such as the median, mean, or COD) in 95 repeated sampling trials out of 100.

Date of Sale: The date on which the real property sale was agreed to. The data of recording may be used as a proxy for the date of sale. (See Transaction Date)

Deed Recordation: The process of registering a real property sale with the county recorder's office.

Dispersion: The degree to which data are distributed around a measure of central tendency. Measures of dispersion include the range, average deviation, standard deviation, coefficient of dispersion, and coefficient of variation.

Dollar-Weighted Mean (DWM): The measure of central tendency weighted by the dollar value of each entry. It is calculated by dividing the sum of all the adjusted assessments by the sum of all the adjusted sales prices.

Factoring: The process by which all assessments or a group of assessments are adjusted to meet the legal level of assessment. Factoring is considered appropriate when coefficients of dispersion are relatively low. The correct factor is calculated by dividing the target level of assessment by the current level of assessment.

Intangible Property: The non-physical evidence of ownership and of property rights such as patent rights, copyrights, notes, mortgages, deeds of trust, and stock certificates.

Mean: A measure of central tendency. The result of adding all the values of a variable and dividing by the number of values.

Measures of Central Tendency: Those statistics that measure the tendency of ratio data to center about a typical or central value. Measures of central tendency include the median, the mean, the mode, and the dollar-weighted mean.

Measures of Variability: Those statistics that measure the amount of dispersion, variability, or dissimilarities of ratio data. Some measure absolute differences, while others measure relative variability. Included as measures of variability are the range, average absolute deviation, and the standard deviation. Measures of relative variability include the coefficient of dispersion and the coefficient of variation.

Median: A measure of central tendency. The value of the middle item in an uneven number of items arranged or arrayed according to size; the arithmetic average of the two central items in an even number of items similarly arranged.

Mode: The value in a set of numbers that occurs most often.

Normal Distribution: A theoretical distribution often approximated in real world situations. It is symmetrical and bell-shaped; 68 percent of the observations occur within one standard deviation of the mean and 95 percent within two standard deviations of the mean.

Observation: One recording or occurrence of the value of a variable, for example, one sale ratio among a sample of sales ratios.

Parameter: Numerical descriptive measure of the population, for example, the arithmetic mean or standard deviation. Parameters are generally unknown and estimated from statistics calculated from a sample of the population.

Parametric: A statistic whose interpretation depends on the distribution of the data. Parametric statistics are most reliable when the data sample is normally distributed.

Population: The total number of properties in an assessment jurisdiction of a property class of interest.

Price-Related Differential: The mean divided by the weighted mean. The statistic has a slight bias upward. Price-related differentials above 1.03 tend to indicate assessment regressivity; price-related differentials below 0.98 tend to indicate assessment progressivity.

Progressivity: The assessment of higher-priced properties at a higher percentage of market value than lower-priced properties.

Property Class: An assigned category of property used in the analysis of sales in the assessment/sales ratio study. Utah uses four principal categories: 1) primary residential, 2) commercial, 3) vacant land, and 4) secondary residential.

Quit Claim Deed: This document transfers to the buyer any interest the seller may have, without warranty to clear title.

Random Sample: A sample chosen such that each unit in the population has an equal chance of being selected.

Range: (1) The maximum value of a sample minus the minimum value. (2) The difference between the maximum and minimum values that a variable may assume.

Ratio Study: A study of the relationship between appraised or assessed values and market values. Indicators of market values may be either sales (sales ratio study) or independent “expert” appraisals (appraisal ratio study). Of common interest in ratio studies are the level and uniformity of the appraisals or assessments.

Reappraisal: A detailed review of property characteristics for each property at least once every five years.

Real Estate: The physical parcel of land and improvements to the land.

Real Property: The sum of tangible and intangible property rights in land and improvements; the rights, interests, and benefits connected with real estate.

Regressivity: The assessment of lower-priced properties at a higher percentage of market value than higher-priced properties.

Sale Price: The total purchase price for which real property is sold on the open market.

Sale Ratio: The ratio of an appraised value (or assessment) to the sale price of a property.

Sales chasing: Sales chasing is the practice of using the sale of a property to trigger a reappraisal of that property at or near the selling price. Sales chasing causes invalid uniformity results in a sales ratio study and causes invalid appraisal level results unless similar unsold parcels are reappraised at a method that produces an appraisal level for unsold properties equal to the appraisal level of sold properties.

Sample: A set of observations selected from a population. If the sample was randomly selected, basic concepts of probability may be applied.

Standard Deviation: The statistic calculated by subtracting the mean from each value of a sample and squaring the remainders, adding these squares together, and dividing by the sample size less one, and finally taking the square root of the result.

Statistical Estimator: This estimates some characteristic of the sample drawn from the population for study. Parameters are used to estimate some characteristic about the population in general.

Statistics: Numerical descriptions calculated from a sample to estimate measures (parameters) for the population. Statistics include the mean, median, and the coefficient of dispersion

Transaction Date: The date the transaction occurred.

Warranty Deed: A document from seller to buyer transferring title free and clear of all encumbrances except those specifically spelled out or of public record.

Weighted mean ratio: Sum of the appraised values divided by the sum of the sales prices, which weights each ratio in proportion to the sale price.